Linking People and Technology With the Ammunition Enterprise Portal

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Over the past 30 years, ammunition community organizations have developed various information technology (IT) applications to support specific mission and organizational assignments. An inventory of software used by the Program Executive Office for Ammunitions (PEO Ammo), the Joint Munitions Command (JMC) and the Armaments Research, Development and Engineering Center (ARDEC), identified more than 40 distinct functional and organizational computer programs covering numerous financial, technical and administrative applications.

Organizational boundaries, relationships, geography and technological limits have necessitated unique database management systems, user interfaces, data definitions, accessibility and operating systems. In the late 1980s, many organizations attempted to connect applications to facilitate the data exchange. Enterprise architectures attempted to do much the same in the 1990s. What has evolved today are stand-alone applications that exchange data at the application level, forming the initial enterprise architectures for the future. Attempts to link these stand-alone systems have been problematic, spawning complex issues such as data synchronization and integrity, unstandardized data definitions and data availability.

Ammunition Enterprise Portal

The Ammunition Enterprise Portal was established by PEO Ammo, JMC and ARDEC to integrate people, processes and infrastructure. The intent is to use the portal to transition the ammunition community from those initial enterprise architectures to an integrated enterprise environment that meets the community's IT strategic goals and ensures that information is managed as a tangible and critical resource. The key to this is the ability to identify, define, standardize and consolidate enterprise processes and move them to a secure, automated environment.

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The Portal addresses two specific IT strategic initiatives:

- To provide a secure, Web-based solution to collect, host and eventually assimilate the diverse applications used in the ammunition community.
- To establish a collaborative environment for the diverse and geographically separate ammunition community.

Integrated product or Six Sigma teams began identifying and documenting current processes, roles, relationships and responsibilities. Next, they looked at process inputs, outputs, definitions, ownership and measures, data definition and the content management structure, which provides the cornerstone for integrating and developing new and existing applications. Finally, they focused on how teams function in the Portal's Community of Participation (COP) section, with emphasis on the ammunition community's ability to work as a team using the collaboration tools provided there.

The first step to a fully integrated infrastructure consistent with DOD operational architecture and security requirements is to provide a standard methodology for collecting, identifying, consolidating and assimilating the applications into a data-centric environment. The Portal promotes full enterprise access to the ammunition community's administrative, technical and financial data through a single logon, Web-based portal while

maintaining appropriate security, copyright, proprietary, ownership and distribution protection.

Core Areas

The Ammunition Enterprise Portal has two core areas — the COP and the Ammunition Enterprise Systems (AES). The COP is a collaborative knowledge management tool that allows geographically dispersed and organizationally diverse teams to communicate, access and share common data. This portal section is built around a team-room environment that has five collaborative areas: messaging, document management,

> Fully integrated applications are those applications that use the same database structure, database schema, data definitions, fro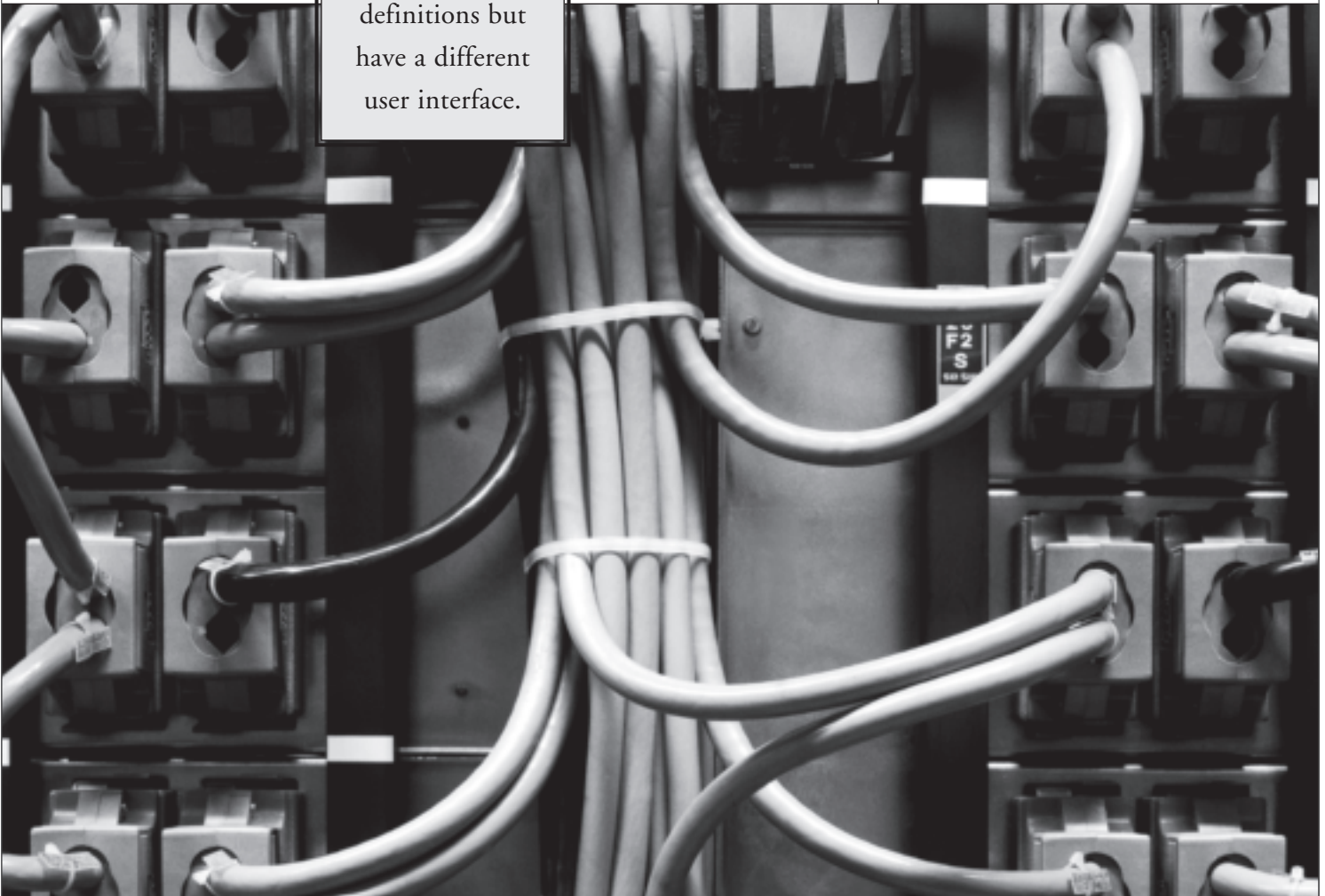nt-end and user interface functionality. Interfaced systems may have the same database application and structure and the same data definitions but have a different user interface.

tasking, calendar and scheduling and discussion forum. Each area links to other areas, providing a virtual workspace.

At the team room's foundation is the document management area, which allows for storage, retrieval and configuration management of team documents. Individual profiles drive the security and accessibility down to the document level, while standard content management structure and data definitions provide a framework for data storage, access, sharing and maintenance. Future plans call for

providing users access to Web conferencing, secure instant messaging and interoperability between Microsoft® Outlook functions.

The AES provides a single access point for collecting the ammunition community's financial, technical and administrative systems and applications. AES applications can be fully integrated, interfaced or linked. Fully integrated applications are those that use the same database structure, database schema, data definitions, front-end and user interface functionality. Interfaced systems may have the same database application and structure and the same data definitions but have a different user interface. Other applications may only be linked to the AES with a transition plan to eventually integrate or fully interface the application.

The AES adopted the "codification" methodology to discretely measure integration levels into the enterprise depending on the type and revision of the database application, standardized structure, data dictionary integration and standardization and shared user authentication and security level. The AES's goal is to consolidate the diverse ammunition systems and applications and merge them for common single access for all acquisition community members.

The AES contains the Web Ammo system — a budgeting tool for developing the Program Objective Memorandum, the Budget Estimate Submission and the President's Budget for all ammunition items — and Web Ammo, the Engineering Support in Production (ESIP) system, used to develop and staff budget information for ammunition items in production. In addition to these systems, the AES is developing a workflow tool and has identified several other active ammunition applications for linkage and transition to the Portal.

The Community of Interest (COI) provides links to DOD ammunition-related organization Web sites as well as those of industry partners. Plans for the COI area include a contractor integrated technical information service environment for industry.

The AES methodology focuses on delivering geographically dispersed information to end users rather than providing new all-encompassing

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systems/applications. It concentrates on identifying, collecting, coordinating and linking enterprise data resources, then providing the widest possible access to this data via Internet tools. This approach underscores the belief that properly organized data has tremendous value to workers throughout the enterprise and ensures the entire ammunition community benefits from being able to access information quickly instead of waiting for the development and implementation of complex applications. With data readily accessible, increasingly complex applications can evolve as new requirements are identified. Principal data-centric approach components are:

- **Bring data together.** Information is brought together through a link, interface or integration in a single common environment for Internet "publishing."
- **Stay focused on the data.** Use what data exists today to add value quickly. Deploy and expand the current data rather than developing new applications.
- **Leverage the Internet.** Use Internet technologies to deploy newly organized data as widely as possible. Given the right security and accessibility, the entire enterprise is provided data access.
- **Simplify use.** Data accessibility coupled with standardized user interface minimizes user training and facilitates navigation between applications within the Portal.

- **Add more applications.** Leverage existing data that are widely deployed on the intranet/Internet. Applications that follow can build on a rich data environment and be more focused on specific, narrow tasks.

Path Forward
The Ammunition Enterprise Portal allows the ammunition community to collaborate and fully use data in a secure Web-based environment while maximizing Army and DOD data and IT resources. The goal is to transition from an IT-driven environment to an information management, knowledge-based integrated environment — a true Ammunition Enterprise Portal. Visit the Portal at **http://ammoportal. altess.army.mil**.

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